SILAGE IN SUMMER

Good Crops Properly Stored in the Silo Become Insurance Against Drought to the Dairyman.

(By C. A. Hutton, Division of Extension, University of Tennessee.)

During July and August pastures are short and dry, flies bad and the weather hot. Under such conditions cows can not profitably yield milk without some supplemental feed. Experiment Stations and dairy farms have found that the summer silo best meets this need for supplemental feed Many of the most progressive dairymen consider silage as essential for summer use as it is for winter.

The dairyman who has a small silo can be just about indifferent to sum mer droughts. It is seldom so dry that fair crops of silage can not be

Let the man beginning with a small herd and expecting to increase that herd build a silo small in diameter, but vinced of the value of silage, the small silo may be filled for summer use and by showing them something good. a larger one built for winter.

For summer feeding it is easy to guide now, one may think of these facts: A silo with an inside diameter of 12 feet will accommodate 37 head of cattle if they are fed 30 pounds per just as good stock as the other man. head. If the feeding is made 20 pounds per head, 56 cattle may be taken care of; if 15 pounds, 75 cattle.

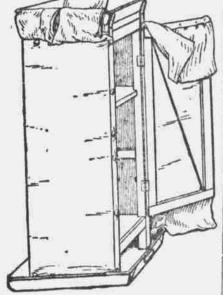
Now is the time to prepare to meet the drought of next summer. Crops of corn and sorghum may be planted on stubble land immediately after the crop of wheat, oats or barley is harvested. Prepare the soil by the "subsoil method," and good yields of silage may be expected.

MAKE AN ICELESS REFRIGERATOR AT HOME

Food Supplies Can Be Kept in a Wholesome Condition During the Hot Weather.

refrigerator, or milk cooler, is a great type today and go off by himself for convenience. This is described in a ten years to conduct his breeding opnews letter from the United States De- erations. Upon returning he will, expartment of Agriculture. The refrig- cept by the greatest accident, find that erator consists of a wooden frame, cov- he is producing something far differered with canton flannel or some sim- ent from that in popular demand. The flar material. It is desirable that the surest way to know what you have is frame be screened, although this is not by comparison with others. The Counabsolutely necessary. Wicks made of ty Fair is your opportunity. the same material as the covering rest in a pan of water on top of the refrigerator, allowing the water to seep down the sides. When evaporation takes place the heat is taken from the inside, with a consequent lowering of the temperature. On dry, hot days a temperature of 50 degrees can be obtained.

Make a screened case 31/2 feet high with the other dimensions 12 by 15 inches. If a solid top is used simply place the water pan on this. Other-



Evaporation of water from the flannel rags lowers the temperature inside the refrigerator.

used indoors have the whole thing enameled. A covering of white canton plainly to their popularity, fiannel should be made to fit the frame. Have the smooth side out and button arranged so that the door may be openred without unfastening these hooks. This can easily be done by putting one row of hooks on the edge of the door near the latch and the other just opeach side extended far enough to cover the crack at the edge of the door. This forms an insulating jacket. This dress or covering will have to be hooked around the top edge also. Two double strips one-half the width of each side should be sewed on the top of each side and allowed to extend over about 21/2 to 3 inches in the pan of water. to another and back and forth where The bottom of the covering should extend to the lower edge of the case.

This makes a very attractive and useful iceless refrigerator in places not damp, nor near water.

FOR THE DAIRY HERD TAKE THE STOCK TO YOUR FAIR

Beef Cattle Specialist Calls Attention to Value of Exhibiting Farm Products

COUNTY FAIRS ARE POPULAR

Good Place to Advertise the Fact That Your Live Stock is What It Ought to Be-Successful Farmers Advertise All the Time.

(By R. M. Murphy, Division of Extension, University of Tennessee.)

Have you picked out the animals you intend to show at your County Fair this fall? If you expect to win, rather tall, of sufficient capacity to It's time for the selection. If you are feed the present herd through the win- really breeding something that your ter. A little later, when a larger silo neighbors would be interested in there is needed for winter feeding and the is no better place to advertise than at owner has become thoroughly con- your County Fair. Your neighbors will be there. Surprise them a little

Of course, they haven't been taking ascertain the diameter of the silo the chances are that if they wanted to buy an animal of the breed you have your breeding operations seriously and needed. Complete tables will be sent buy an animal of the breed you have to any one asking for them, but as a they would buy from somebody who carries a big advertisement in the paper. Why? Simply because you haven't convinced them that you have

If you have a good animal show him. You can show him to more people in one day at the County Fair than would come to your farm to see him in ten years. Get a catalog and pick out your animals for each class. Make it at least interesting for the man who has been walking away with the ribbons.

A remark that is commonly heard at the fairs is: "I've got one better than that at home." This may be true and doubtless is in many cases, but if Even on Rich, High-Priced Land Some the man who makes such a statement had any public spirit and interest in the improvement of conditions in his county or was awake to his own opportunity he would be ashamed to own the fact.

The greatest problem confronting the average breeder is to keep his animals up to standard. A man may buy For the hot summer days the iccless a herd of animals of the most popular

MARKET REPORTS SENT OUT FREE THIS YEAR

Movement of Tennessee's Strawberry Crop Made Known Daily to Farmers and Dealers-Profits Increased.

The Office of Markets of the United States Department of Agriculture has wise fit the pan closely into the open- put into effect a system of market reing of the top frame and support it porting that has been used this season by 1-inch cleats fastened to the inside by growers and by dealers in perish- er ones well represented. Further, it of the frame. Place two movable able crops. Tennessee is recognized should be fully stocked with the most other very useful early vegetables shelves in the frame, 12 to 15 inches as the leading strawberry State in the useful kind of trees. The main points have the same cultural requirements, apart. Use a biscuit pan 12 inches Union. During the movement of strawsquare on the top to hold the water, berries two offices were maintained in and where the refrigerator is to be Tennessee from which were sent daily market reports to those desiring such. The telegraphic reports cost those who received them the expense of the telegraphic service; the reports that were mailed cost nothing.

These market reports were secured by collecting from all parts of the country facts as to the movement of perishable crops under consideration. These reports were telegraphed daily by the railroads, government offcials and others to headquarters at Washington. They were immediately summarized and the resulting totals telegraphed to stations like the one established this year in Tennessee, at Humboldt. From Humboldt the strawberry growers and shippers were supplied with the information if they asked for it. Through a proper use of the figures, the producer has been able to get from his crop the greatest possible returns.

The station at Humboldt supplied West Tennessee with Information. A similar station for the distribution of market news in the eastern part of the State was located at the weather bureau office, Chattanooga,

It is too early yet to hear from users standing in a large pan to catch any of the market reports, but a compardrip. The pans and case may be son of the demand for the reports this painted white, allowed to dry, and then year as compared with last year points

The Division of Extension of the University of Tennessee, Knox ile, the covering on the frame with buggy has been co-operating with the Office or automobile curtain hooks and eyes, of Markets in the establishment of better market conditions and knowledge and will be glad to take up with anyone any peculiar problems surrounding his work. The Office of Markets does not restrict its efforts to perposite the opening with the hem on ishable products, but takes an active interest in every farm crop.

TO KEEP THE HAWKS AWAY.

(By Richard N. Crane, Division of Extension, University of Tennessee.) Where hawks give trouble in the poultry yard run strings from one tree the chickens frequent. Hawks are

yard.

the railroad regularly. never known to pick up chickens except when on the wing. Strings prevent hawks swooping through the

CULTIVATE WITH SPIKE-TOOTH HARROW



A great many farmers kept up the there. Perhaps every drop is not held until it is six or eight inches high. sorbs more as it falls. soil every drop of moisture that gots cultivate 18 to 20 acres a day.

cross harrowing of corn fields during but so much is sayed that corn on cul the drought which prevailed over tivated land this year shows up much East Tennessee and other parts of the better than other corn. The cultivated state. Corn can be cross-harrowed land holds the rain and quickly ab-

Such cultivation destroys weeds and This photograph of a cross-harrowgrass while small, but above all, in a ing demonstration was taken in Maseason like this, it keeps up the earth rion county, May 8. One man and mulch, the blanket that holds in the team with a sixty-tooth harrow can

ON EVERY FARM

Trees Compared With People-Each Community Should Have Young and Old

GUARD AGAINST ANY FIRES MANY OTHER VEGETABLES

Trees Should Be Grown-Poorer Soils Should Be Made to Produce Trees in Abundance.

(By W. R. Mattoon, Forest Examiner.) The present movement to build up

the farm and make it pay its owner a substantial income necessitates serious attention to the farm woodlot. Tillable land, pasture, and woodland portion of the farm managed for the continuous production of timber either to be used on the farm or for sale, or both. This includes posts, poles, firewood and common building material.

clearly between a woodlot and a wood- take care of itself. ed pasture. In many regions the wooded pasture is exclusively thought in April and May be given over so of and known as the woodlot. It gen- largely to the odorous-some folks erally consists of a very open stand or would say malodorous-onion? It is mature and overmature trees. The good. It is healthful. It is appetlyabsence of seedlings and larger repro- ing. It thrives in cold weather and duction forcibly suggests the condition withstands frost and cold. It revels of a town made up wholly of aged in rain. Every garden should have a people. Each will become extinct by plentiful supply. But in many gardens the passing away of the present gener- the onion has a monopoly of space ation. The woodlot should contain and attention, and this is quite betrees of different ages with the young- youd its merits and its deserts. by which to judge the latter are the and many a town garden, and a whole intrinsic value of wood for farm uses host of farm gardens would better and the rate of growth.

Pastured Woodlots Rulned. fully controlled, destroys the valuable and asparagus. protective leaf mulch of the forest seedlings and sapplings. If continued potato or the mature bulbs of any othas a steady practice heavy pasturing er variety) from October to January, stroy the woodlot. The worth of the from February to May. But asparaforage growing in a good woodlot is gus is ready for use in early April, light will reach the ground. In wellis well above the reach of animals. tion may sometimes be allowed, if rieties of radish to grow big enough necessary, but extreme caution is im- to eat. In the face of these facts why perative, if harm is not to be done. and, generally speaking, it is best to keep stock out.

Fires should be rigidly excluded at all times. A single fire, removing the protective leaves and litter, may cut down the subsequent increase of the timber by as much as 30 to 50 per cent during the next few years.

It would be well if every farmer would select and set aside a certain part of the farm as a permanent wood- (By C. D. Lowe, Division of Extension, lot. As a matter merely of convenience and the saving of time and unnecessary expense in the future, a every farm. Repair timber is sometimes needed on the farm at a time when a trip to town would mean a costly delay. Incidentally small amounts of high-grade logs can be grown, which should bring a good price. The area to be devoted to the permanent woodlot will vary usually from about 10 per cent in regions of good soil and high land value to 25 per cent or more where the soil is less uniformly fertile and part of the surface steep or rough.

The people of Henderson county met recently to make arrangements to fill an order placed by the N. C. and St. L. railroad for a sample case of eggs to be used on diners. The community hopes to supply strictly fresh eggs to

Crop prophets in Smith county say that the acreage of soy beans is this year ten times what it was last year.

GARDENS THAT GROW ONIONS

Should Grow Other Things Too -Don't Worship the Onion As Did the Egyptian

On the Other Hand, Do Not Fall to Plant Onions in the Garden, for the Onion is Good, Healthful and Appetizing.

(By C. A. Keffer, Division of Extension, University of Tennessee.)

A stranger traveling over Tennessee and taking note of gardens during the month of April, would decide the make up three main classes of land to Tennesseean, like the ancient Egypbe dealt with in the future develop- tian, worshipped the onion. He would ment of the farm. A woodlot is that find turnips in the fall and winter, and onions in the winter and spring, and beans all summer long.

Far be it from this writer to belittle so popular a vegetable if he could, It is important here to distinguish Besides the onion is strong enough to

But why should Tennessee gardens

It just happens that three or four serve their owners if three-fourths of the space now devoted to salad onions Pasturing a woodlot, unless care- were planted to spinach, peas, radish

The onion is ready for use earlier floor and does great damage to young than any of these; planted (multiplier, in hardwood stands will inevitably de- it yields its tender young product very small indeed, since the trees will and spinach sown in February and be so close-spaced and very little sun- March, gives a delicious pot salad in April and May, while peas sown in stocked timberland, where the foliage January (any round seeded kind) are ready for the table in early May. It light pasturage under careful regula- takes twenty days for the earliest vashould so many gardens yield only onions through April and early May I am as fond of onions as the Back Bay resident is of beans. I count no garden that is onionless a success. But why nothing but onlons?

LOUSY YOUNG STOCK

University of Tennessee).

A dipping vat is the most satisfactory convenience for the control of woodlot will be needed on practically lice on young stock, such as calves and colts. The best fluid to use is the standard arsenical solution. The solution is poisonous and should be handled with this fact in mind.

Eight pounds of white arsenic, 24 pounds of sal soda, and one gallon of pine tar will be used to 500 gallons of the final solution. Dissolve the sal soda in 25 or 30 gallons of water by heating and stirring. After thorough solution, add the arsenic and boil for thirty minutes or until all is dissolved. Cool down by the addition of cold water until a temperature of about 150 degrees Fahrenheit is reached. Then add slowly, in a small stream, the pine tar, using care to stir it in well. After this, add to the mixture sufficient water to make 500 gallons, after which

it is ready to use. This solution may be used as a spray as well as in the vat.

Two applications of any good remedy, with an interval of a week or ten days between should produce results.

National Defense

古古古古南南南白古古 Are You Ready to Play Your Part?

HE power of a nation in time of need is the producing power of her industries.

America must find out what this producing power is and then develop it. The capacity of every plant must be gauged. The ability of every man must be known. For War is Mechanical. It is Electrical. It is Chemical. It is Mining, Manufacturing, Transportation. It is EVERY phase of Engineering fused into a single industry----"THE NATION'S DEFENSE."

THE NATION'S DEFENSE."

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WHAT CAN** L. DOIN**

with the Engineers. ... WHAT CAN I DOT

This is, doubtless, the question you are asking yourself. Here is the answer: If you are a manufacturer co-operate fully with the Engineers so they can do their job quickly and efficiently, if you are a working man help your employer to help the Engineers and be prepared, if so needed, to be a Soldier in Industry, behind the hing line, which is just as important as being a soldier on the firing line; if you are a business man or a professional man, or whoever you are, help mobilize "GOOD WILL" behind this patnotic link of the Engineers in behalf of National Defense and International Peace. COMMITTEE ON INDUSTRIAL PREPAREDNESS OF THE NAVAL CONSULTING BOARD OF THE UNITED STATES

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The American Chemical Society 29 West 39th Street, New York Engineering Societies Building

National Defense and International Peace

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Preparedness and Peace and the Engineer HE United States desires peace, based on justice and maintained with honor. But to income this bank on justice and maintained with honor. But to insure this kind of peace Americans must know that nations are now defended not alone by fighting men,

but by fighting industries.

The Engine is of this country, trained as only American Engineers are trained, hold that truth to be as fundamental as the law of gravity. With the authority of the United States Government more than 30,000 Enumeers and Chemists, members of five emment American scientific bodies,

are making for the first time in the history of the Government a minute, everying survey of the industrial resources of America. They will go to the factories and mines of the land and with their sole method, efficiency, and their sole mouve, patriousin, form a vast, flexible organization, such as he would has never known Their work will be the basis for creating in this country a true line of defense in time of war the ability to produce swiftly, abundantly and with sustained power all the thousand and one elements of modern warfare.

Without such production there can be no efficient army and navy, Military Preparedness wins the battle. But Institutional Preparedness wins the WAR1 Industrial Frepared less involves no huge expenses. Only the KNOWLEDGE of what American Industry can do. To KNOW the extent of each plant, the equipment of each slop, the capacity of each machine, the ability of each man. THAT is the exerce of Industrial Fre-paredness. That is the task to which thaty thousand Engineers are pledged. The Engineers' work will lay for all time the ghost of the trust" by making it possible to have munitions made in thousands of plants.

This vital work of the Fugineers will supply the military authorities in Washington with information never before collected, and it is carried forward wallout a dollar's cost to the Government. And this advertisement is not paid for. The Associated Advertising Clubs of the World have pre-pared the copy and the publishers have partiolically responded and printed it without pay for the sake of National Defense and International Peace. All Americans are asked to rivide hands with the Engineers so that America shall learn how to raise up an imprognable wall of defense against a day of trial.

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Engineering Societies Building. 29 West 39th Effect, New Year.

SCHOOLBOY TRAPPERS



The teachers in one small-town school in Illinois aroused the interest of their pupils in the campaign to kill flies last spring. The youngsters made traps and sold them to the merchants for a neat profit on each trap. This profit was devoted to a fund for the Boy Scout troop. The kids are planning to do a "big business" in traps this season.

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